#### **ENERGY MANAGEMENT STANDARDS FOR SUCCESS**



### Agency:

- Has reduced energy intensity (Btu/gsf) in standard buildings by 30 percent compared with 1985 and is on track for 35 percent reduction by 2010.
- Has reduced energy intensity (Btu/gsf) in all facilities by 2 percent compared with 2003 and is on track for 20 percent reduction by 2015.
- Uses at least 2.5 percent renewable energy as a percentage of facility electricity use. Has a metering plan approved by OMB and DOE and is on track in implementing the plan to meter energy use in 100 percent of appropriate facilities by 2012
- Demonstrates that 100 percent of new building designs beginning October 1, 2006, are 30 percent more efficient than the 2004 International Energy Conservation Code (residential buildings) or the ASHRAE Standard 90.1-2004 (non-residential buildings), if life-cycle cost effective.

## Agency:

- Has reduced energy intensity (Btu/gsf) in standard buildings by 20 percent compared with 1985.
- Has reduced energy intensity (Btu/gsf) in all facilities by 1 percent compared with 2003 and is on track for 20 percent reduction by 2015.
- Uses at least 1.5 percent renewable energy to power facilities and equipment.
- Has a metering plan approved by OMB and DOE to meter energy use in 100 percent of appropriate facilities by 2012
- Demonstrates that at least 50
   percent of new building designs
   beginning October 1, 2006, are 30
   percent more efficient than the 2004
   International Energy Conservation
   Code (residential buildings) or the
   ASHRAE Standard 90.1-2004 (non-residential buildings), if life-cycle
   cost effective.

# Agency:

- Has not yet reduced energy intensity (Btu/gsf) in standard buildings by 20 percent compared with 1985.
- Has not yet reduced energy intensity (Btu/gsf) in all facilties by 1 percent compared with 2003.
- Does not use at least 1.5 percent renewable energy to power facilities and equipment.
- Does not have a metering plan approved by OMB and DOE to meter energy use in 100 percent of appropriate facilities by 2012
- Cannot demonstrate that at least 50 percent of new building designs beginning October 1, 2006, are 30 percent more efficient than the 2004 International Energy Conservation Code (residential buildings) or the ASHRAE Standard 90.1-2004 (nonresidential buildings), if life-cycle cost effective.

# ENERGY MANANGEMENT SCORECARD Department of X

	CURRENT STATUS	PROGRESS	COMMENTS
·	(As of January 1, 2006) <sup>1</sup>		
ENERGY MANAGEMENT Senior Energy	Reduction in energy intensity in standard buildings compared with 1985:     30 percent and on track for 35 percent by 2010 _(date)_ (G)     20 percent _(date)_ (Y)	Actions taken since July 1, 2005:  Provide a brief summary of key actions.  Color	Assess general progress against goals of Executive Order 13123 and the 2005 Energy Policy Act (e.g., on track, aggressive, slippage, etc); highlight if change in momentum.
Lead DOE Analyst: Rick Khan  Lead OMB Analysts: Cyndi Vallina and Rob Sandoli	<ul> <li>Reduction in energy intensity all facilities compared with 2003:         NA 2 percent and on track for 20 percent by 2015 _(date)_(G)         NA_ 1 percent _(date)_(Y)</li> <li>Use of renewable energy as a percent of facility electricity use:         _ 2.5 percent _(date)_(G)         _ 1.5 percent_(date)_(Y)</li> <li>Metering plan to meter energy use in 100 percent of appropriate facilities by 2012:         _NA_On track in implementing plan _(date)_(G)         NA_Plan approved by DOE and OMB _(date)_(Y)</li> <li>Percent of new building designs that are 30 percent more energy efficient than relevant code         _NA_ 100 percent _(date)_(G)         _NA_ 50 percent _(date)_(Y)</li> </ul>	Planned actions for next six months:  • Outline key actions to be taken between 1/1/06-7/1/06	<ul> <li>Discuss critical actions planned for next six months (as appropriate).</li> <li>If no change in status is expected within one year, discuss what OMB/DOE assistance might be necessary.</li> <li>Use additional bullets to explain or enhance discussion in first two columns (e.g., legislative barriers, or other risks implementation, management changes at agency, etc.).</li> </ul>

<sup>&</sup>lt;sup>1</sup> Status will be updated once annually (Jan 1) to reflect performance data collected at the end of each fiscal year. Progress will be assessed twice annually (Jan and July). Quantitative standards for success for Yellow and Green will increase each year in accordance with requirements of Executive Order 13123 or the 2005 Energy Policy Act.

### **Description of Energy Management Scorecard**

- The scorecard will contain six scoring criteria, or measures (one TBD).
- Two criteria are based on requirements of Executive Order 13123. The Department of Energy has historic data to assess agency performance and continues to collect this data annually.
- Three criteria tie to new requirements in the 2005 Energy Policy Act (EPACT). Agencies will not be assessed against these criteria until they take effect. (FY 2006 data provided by agencies on January 1, 2007 will provide the basis for the first assessment of new EPACT requirements.)
- Quantitative targets for some measures become more aggressive over time and
  will be updated in accordance with new Executive Order or EPACT requirements.
  Although several agencies achieved Yellow or Green status in this initial
  assessment, there is potential for backsliding in agencies' status scores as agencies
  are assessed against requirements that are new (e.g., metering, efficient building
  design) or become aggressive (e.g., percent improvement in energy efficiency,
  percent renewable energy purchased).
- Status will be updated once annually in January using fiscal year data submitted by agencies. Progress will be assessed twice annually (January/July).

### **Major Changes to the Energy Scorecard**

Based on agency comments received, the following changes were made:

- Moved the measure on procurement of energy efficient (EE) products, which is required by both Executive Order 13123 and EPACT, to the Environmental Stewardship scorecard. EE products will be required as part of a comprehensive green procurement program so that all agencies (even those that don't control federal facilities) can be held accountable for EE product procurement.
- Added a measure on metering building energy use in accordance with EPACT. Agencies will be scored on whether they have approved metering implementation plans (Yellow) and whether they are implementing it on schedule (Green).
- Accepted suggestions for clarifying language for some measures and standards for success.
- Deleted the measure regarding the reduction in petroleum use in buildings. We've developed options to modify, replace, or not replace this measure on future scorecards.

# **Justification for Dropping the Petroleum Reduction Goal and Future Options**

Agencies raised a number of comments regarding the measure on reduction in petroleum use in buildings. First, Executive Order 13123 does not set quantitative targets for reducing petroleum use in buildings, and EPACT does not mention it. Second, although agencies had largely switched from fuel oil to natural gas since the 1985 baseline year, current higher natural gas prices may force agencies to switch back to fuel oil to save money when appropriate. In doing so, agencies may backslide on the oil reduction targets. Finally, petroleum used in buildings comprises a relatively small proportion (<5 percent) of total petroleum used by the Federal government.

Several **options** can be considered for future scorecard modifications:

- 1. Retain the petroleum metric but lower the quantitative Green/Yellow targets for percent petroleum reduction. Standards are currently 50/30; could lower to 40/25. More agencies would meet Green and Yellow standards for success.
- 2. Add a measure on energy reduction in energy intensive buildings. This EO 13123 requirement is not currently covered on the scorecard because new EPACT language combines standard and industrial buildings into one category.
- 3. Add a water efficiency measure to the Energy Scorecard. (Water conservation is addressed within Environmental Stewardship scorecard under the Sustainable Green Building MOU.) No statutory or EO goal currently exists, and the goal in EO 13123 is process-oriented. It calls for agencies to implement a water management plan and have in place at least four separate water efficiency improvements (defined in the FEMP best management practices) in: 30% of facilities by 2006 50% of facilities by 2008 80% of facilities by 2010.
- 4. Add a measure on investment in energy efficiency and renewable energy projects (direct appropriations, ESPC/UESC investments) as a percentage of facility energy costs. Data already exists and is tracked annually. Measure could be as a percentage of agency facility energy costs and could be averaged or normalized to need based on each agency's current performance and size.<sup>1</sup>
- 5. Add a broad measure requiring approved annual implementation plans that address water conservation, energy efficiency investment, and other critical components, similar to the PMA Proud-To-Be goals.
- 6. Do not add another measure.

5. 2 5 1.50 **600 6**110 11.02 11.00 11.00 11.00

<sup>1</sup> In order to achieve the 10 percent energy intensity reduction by 2010 (2003 baseline) required by EPACT, the federal government needs to reduce its energy use by 41 trillion Btu. According to DOE's calculations of energy savings yielded per past investments (8,000 Btu saved per \$1 investment), these energy savings require an investment of about \$5.1 billion or \$1 billion annually. This investment level is equivalent to approximately 18 percent of the government's annual energy cost.